



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

11

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/416,779	10/13/99	PREPARATE	F BUV-003.01

HM12/1113

PATENT GROUP
FOLEY HOAG & ELIOT LLP
ONE POST OFFICE SQUARE
BOSTON MA 02109-2170

EXAMINER	
ZEMAN, M	
ART UNIT	PAPER NUMBER

1631

DATE MAILED:

11/13/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/416,779

Applicant(s)

PREPARATE ET AL.

Examiner

Mary K Zeman

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claims 1-19 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) ____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

Art Unit: 1631

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 6a-18 have been renumbered 7-19.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-6, drawn to isolated polynucleotide probes, classified in class 536, subclass 23.1.
- II. Claims 7-12, drawn to sequencing chips comprising polynucleotide probes, classified in class 536, subclass 24.3.
- III. Claim 13, drawn to a hardware system, classified in class 700, subclass 266.
- IV. Claims 14-18, drawn to methods of sequencing by hybridization, classified in class 435, subclass 6.
- V. Claim 19, drawn to a computer readable medium, classified in class 345, subclass 203.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II/IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product

Art Unit: 1631

as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the polynucleotides do not need to be affixed to a chip to be used for hybridization assays. Also, the probes can be used in PCR, and recombinant expression of encoded polypeptides.

Inventions I and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions differ in their components, structure, use, etc. The isolated polynucleotides of Invention I do not appear to be a part of the apparatus of Invention III, nor does the working of the apparatus of Invention III appear to require the isolated polynucleotides. As such, they are unrelated.

Inventions I and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions differ in their components, structure, use, etc. The isolated polynucleotides of Invention I are not a part of the computer readable medium of Invention IV, nor does the working of the apparatus of Invention IV appear to require the isolated polynucleotides. As such, they are unrelated.

Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions differ in their components, structure, use, etc. The sequencing chips of Invention II

Art Unit: 1631

do not appear to be a part of the apparatus of Invention III. While the chips can be used with the apparatus of Invention III, they can also be used in completely differing apparatus and methods.

As such, they are unrelated.

Inventions II and IV are separate and distinct as the sequencing chips of Invention II can be used in many other methods besides that claimed in Invention IV. The sequencing chips can be used to determine gene expression, as well as sequence. Further, a method of sequencing can also be performed using convention sequencing methods such as the Sanger sequencing method.

Inventions II and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions differ in their components, structure, use, etc. The sequencing chips of Invention II are not a part of the computer readable medium of Invention IV, nor does the working of the apparatus of Invention IV appear to require the chips. As such, they are unrelated.

Inventions III and IV are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the hardware can be used to run any program requiring the use of a reader and a computation figure. An example is a system for reading and organizing bar codes on a product would be compatible with the claimed system.

Inventions III and V are separate and distinct as the computer readable media of Invention V can have any information or data of any kind that could be unrelated to the workings

Art Unit: 1631

of the system. Further, the system of Invention III does not specifically require a computer readable medium as a component.

Inventions IV and V are separate and distinct as the computer readable media of Invention V can have any information or data of any kind that could be unrelated to the steps of the method of Invention IV. Further, the methods of Invention IV do not appear to specifically require a computer readable medium as a component.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary K Zeman whose telephone number is (703) 305-7133. The examiner can be reached between the hours of 7:30 am and 5:00 pm Monday through Thursday, and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached at (703) 308 4028.

The fax number for this Art Unit is (703) 305-7401.

Application/Control Number: 09/416,779

Page 6

Art Unit: 1631

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center receptionist whose telephone number is (703) 308-0196.

mkz

November 8, 2000

May K. Zeman
Examiner, 1631